

## **CHAPTER-VIII**

### **CONCLUSION AND RECOMMENDATIONS**

The previous chapter provided a discussion of key results obtained from the analysis of data. The present chapter becomes the final part of the thesis and provides the conclusions in relation to research objectives. It also provides recommendations based upon the results achieved for the purpose of contributing towards the fathomless reservoir of knowledge. The chapter comprises different parts. The first part provides a summary of the objective achieved. The second section covers the limitations of the study. The third section outlines the suggestive future areas in which the present research can be extended. The fourth section deals with recommendations resulting from the findings. Finally, the chapter concludes with a summary.

#### **8.1 Achievement of objectives**

The main aim of the study was to examine the corporate environmental accountability in India. In order to achieve this aim various objectives were devised. The target companies from where corporate managers were drawn belonged to six environmentally sensitive sector of Indian Industry selected in decreasing order to market capitalization and the target group of ENGOs was well scattered throughout the country. The study was conducted in India and exclusively corporate sector fell in red and orange category as described by Ministry of Environment and Forests, India; and Non-Governmental Organization members dealt with environmental issues. The questionnaire method for collecting the responses was considered the best available instrument rather than content analysis of published data as it is reported that study of perceptions of managers is least understood in Indian environmental accountability context (Bhattacharya, 2011). The collected data was subject to data analysis with the help of SPSS package. The analyzed data is presented in various tables and figures for the ease of understanding and grasp of underlying meaning of quantitative numbers.

The present study was split into various chapters. The first chapter consists of introductory details; chapter two explains in detail the literature review that formed the basis for development of questionnaire, followed by chapter three which reflected upon

the methodology adopted for conducting the research. The fourth chapter addressed the concept of Accountability. Chapter five presented an understanding of the mandatory and voluntary aspects of corporate Environmental behaviour and reporting. Chapter six provided an overview of 'assurance' building status of Environmental audit. In addition, the chapter also dealt with the establishment of accountability index to measure corporate environmental accountability. Chapter seven provided an outline of findings of data analysis and summarized the perception of managers and members of ENGOs towards the environmental issues. The chapter expressed the relevant findings in the light of literature available, wherever possible, that either supports the results or offers contradictive results. The present chapter i.e., chapter eight, connects the conclusions drawn with the predefined research objectives. The chapter also presents the contribution made by the research towards enriching available knowledge and the future potential areas of research in the field of corporate environmental accountability and stakeholders' involvement.

As suggested in the theme of the study that the overall aim of this study was to understand the environment accountability of Indian firms. The relevant objectives for fulfilling the above aim were framed as under:-

1. To study the transition/positivity in perception of Indian Corporate towards environmental accountability
2. To understand the state-of-the-art of the adoption of voluntary standards relating to environment information disclosure in Indian corporate sector
3. To measure and compare the expectations of the preparers (companies) and the users of environmental reports (Environmental NGOs)
4. To examine the status of environment audit practices in India
5. To establish an environment accountability disclosure index to assess accountability in Indian context

As listed above, the *first objective* of the present study was to understand the positivity in the perception of corporate managers towards the issue of environmental accountability. The objective was split into two parts. The first part of the objective was intended to gain an understanding of the historical background of the environmental proclivity of the corporate. Its journey envisaged various stages beginning with philanthropy, passing

through intermediate stages, till reaching the stature of corporate environmental accountability. The second part of the first objective was based on empirical study. The Indian research study of Bhattacharya (2011) was found to be closely relevant and incorporated in the present research. The perception of managers was captured on four dimensions, namely;

- Adherence to environmental accountability due to personal value system; a virtue as implied by Bovens (2007); level of awareness/knowledge;
- Perception towards disclosure (communication criteria implied from accountability norm of Cooper & Owen, 2007);
- Perception of instrumentality of adoption of environmental accountability in the sense that environmentally responsive activities have an impact on firm value, image etc (Lorraine et al., 2004; Sinkin et al., 2008; and a host of other researchers);
- Perception towards responsiveness or relative importance of stakeholders (NGOs);

It was found that environmentally accountable behavior of managers is the outcome of personal value system (Aragon-Correa et al., 2004; Williams & Schaefer, 2013); opposing views which suggested that Environmental pro-activeness/behavior rests on something more/else also existed. Given the fact that there is scant research done in the area in developing countries as well as specifically applicable to India, questionnaire sought to elicit the existence of environmental variables in perception of managers. Thus, the first objective was successfully achieved through the questionnaire and historical studies.

The *second objective* sought to explore the ‘current state of adoption of voluntary environmental disclosure practices’. The findings of the study were significant to reveal the possible motives of disclosure, the perceived importance of information disclosed, the need of users, and the importance of users of such information. Recommendations based on findings are put forward in the current chapter and in this manner the second objective was satisfied.

The *third objective* was to compare the expectations of the preparers (companies) and the users of environmental reports (Environmental NGOs). In-depth literature review

suggested the inadequacy of environmental information disclosed to fulfill the needs of the users. In order to satisfy this objective, two groups were formed; one represented the corporate and the other represented the ENGOs. GRI standard of disclosure and annual reports of sampled companies were taken as the basis for comparing the expectation of both the groups. These were then used to measure 'sufficiency' and 'relevancy' of the disclosed content. Various differences in the opinions on the above mentioned two grounds were found and these were suggested as possible recommendations where greater attention is required. The results of the empirical study identified specific environmental disclosures that stakeholders expect from corporate as they feel it to be insufficient. Thus, the third objective was successfully accomplished.

The *fourth objective* was 'to examine the status of environment audit practices in India'. In order to gain an insight into the benefits that environmental audit offers, an intensive literature review was conducted and the responses were also solicited from the ENGOs (one of the target groups) regarding the importance of various assurances on environmental aspects that are offered by the audit practices. The study revealed significant attributes of environmental audit that the user group desires. It also revealed the areas where environmental audit is not greatly valued. Thus, the fourth objective was fruitfully achieved.

The *last objective* was an effort to establish an accountability index from the learning gained from conducting the research under the present theme and also from the knowledge formed from their responses to various key questions posed. The index was a summation of existence or non existence of desired range of responses over various pertinent variables. Various important questions were earmarked from the questionnaire that would serve as a tool to calculate the accountability. The score of 1 was allocated if the response prevailed in the designated range; otherwise the score of 0 was assigned. Lastly, a summation of total responses generated an index fourteen dimensions consisting of sixty environmental information disclosure variables formed the basis of the potential environmental accountability disclosure index. In addition, a suggestive checklist of various disclosures was also established that would enhance the sufficiency and relevancy of disclosures. Ultimately, by the achievement of the five research objectives, the overall research aim was fulfilled.

## **8.2 Limitations of the study**

As common with other social research, the present study is also not without a number of limitations inherent in the study. Due to time and cost constraints only two groups of stakeholders namely: Managers and ENGOs were examined as representative sample of preparers and users of environmental information. However, the use of two groups are better than examining the perceptions of only single stakeholder ie., managers or ENGOs alone. The latter group is a strong force and an independent force championing the cause of environment and also interacting with corporate on these issues. Furthermore, they are not driven by any monetary gain for furtherance of their social motive. Various studies conducted in India are focussed on gathering the opinion of only the corporate or investors or customers, while no study has attempted an evaluation of perception of ENGOs and moreover, compared them with that of corporate.

Again, the use of retrospective data rather than longitudinal data precluded examining the chronological as well as casual relationships between personal value change, attitude towards NGOs, disclosure, instrumentality of disclosure components which signal important transitions that were not examined. However, the assumption was to gain an insight into whether there has been positivism in perception of managers on various counts of pro-environment and pro-stakeholder issues. The objective could be achieved by t-test procedure.

Another limitation is the use of questionnaire method for measuring attitude towards various variables. The content was worded in English which may cause some problem in comprehending the meaning. But ease of accessing the respondent delivered enough time to clarify any misunderstanding which may cause attitude bias. Nevertheless, looking at the need to examine the personal attitude or perception, the method seems to be the best as it is not direct where the respondents feel at ease to answer the questions. Hence, integrity in responses can be ensured. Again, the selection of respondents was on the basis of personal acquaintances to tackle the obstacle of unwillingness of corporate to part with any information on the sensitive topic of Environmental issues. However the method was consistent with previous research conducted by Bhattacharya, 2011 on similar environmental issue. The concern that research gathered opinions of corporate falling under red category and with highest market capitalization in their industry, limits

wider generalization to all industry groups whether falling under red, green or orange category. However, the investigation of personal value system does not restrict itself to any such domain but is characteristic of general corporate behaviour.

### **8.3 Suggestions for future research**

The analysis of the present study indicates possibilities for further research which are suggested as follows:

- The future research is required to explore the association between personal values held by a manager as an individual and the level of practice of environmental accountability in an organization.
- Primarily, the study was qualitative in nature and therefore, a future study is required with constituents from society such as governmental controlling agencies, environmental consultants, auditors, investors, suppliers, lending agencies with enlarged sample size to establish quantitative relationships between dependent and independent variables in future study. The categories of respondent groups need to be enhanced to include viewpoints of different categories of stakeholders.
- Indepth interviews and intensive case studies on leading firms could be valuable in the situation as the highly positive role of industry leaders gets dimmed when they are assembled in their industry group and evaluated along with low performers.
- A longitudinal study would further enhance examination of temporal effects rendering significant value to the transition studies of Indian corporate over a number of years and definite econometric models can be studied to lend greater statistical validity by using more robust test on the data.
- Again, a comparative study of environmental performance against the presence of environmental variable in personal value system can be undertaken to identify the gap between attitude and performance. This study can also be extended to integrate impacts on economic performance as well.

- Yet another area which can be explored further is the role of accountant and audit in lending assurance to the disclosed information, market valuation of such activity and cost benefit analysis of such actions.
- It is anticipated that comparative studies are undertaken on corporate between leaders and followers to evaluate and deciphering their perception, drawing relationships between performance and outlook.
- Similar studies can be undertaken beyond India, i.e., in comparison with other developing countries to draw out similarities and differences in the stakeholders' perceptions and requirements.

#### **8.4 Conclusion and recommendations**

The topic of Corporate Environmental Accountability as a field of research and practice has not received much attention in developing countries and particularly with respect to India. Again, the personal values system that makes a person feel responsible for safeguarding the environment has not been properly researched with regard to corporate managers. More emphasis has been towards content analysis for environmental disclosure rather than to learn the championing effect of decision makers who are responsible for such actions. The views of stakeholders have also not been adequately considered with respect to the issue of environmental accountability. The present study extends CEA literature by providing at one place the perspective of corporate as well as stakeholders. Thus, it contributes to existing empirical knowledge from both inside – outside perspective instead of restricting to one-sided view of the subject matter in developing country context.

In particular, the research explains how individuals can be instrumental for incorporating environmental issues into corporate strategic decision making and bringing about the institutionalization of environmental accountability as a desirable paradigm. The research explored that there is huge gap in the understanding of the subject of Corporate Environmental Accountability and it is a potential area for conducting further research.

### **8.4.1 Policy recommendations**

On the basis of key findings discussed in the preceding chapter, the present chapter presents important actions by which the practice of corporate environmental accountability can be strengthened. It needs a multipronged strategy with collaboration from various bodies and institutions of our society like academia, corporate itself, stakeholders, SEBI, pollution control boards, government etc. Therefore, the policy recommendations are accordingly presented under major heads.

#### **ROLE OF ACADEMIA**

To begin with, an effective role that academia could play as an institution of higher learning is central to bring about a change in social mindset towards environmental concerns. Policy recommendations for academia are as follows:

- The subject of environment should be clubbed with existing popular professional courses such as MBA with dual specialisation in environment etc.
- Empirical research relating environmental actions with impacts on share price, firm value, sales, profits, savings in cost, competitive advantage etc should be conducted so that the corporate can be make self-assured judgements as corporate managers have highlighted that they feel difficulty in understanding the impact of environmental actions on the corporate.

#### **ROLE OF CORPORATE**

Knowledgeable employees are an invaluable resource which provides synergistic benefits to the corporate in all spheres of operations. The role of corporate is therefore essential to bring about a transformation of attitude and values of a person into sustainable action.

- The employees of the organisation should be provided with opportunities to be actively involved in firm-wide environmental promotion practices.
- Periodic training sessions should be organised by corporate for imparting knowledge and awareness of environmental issues to managers. The training will help the managers to acquire action-competence as well as work towards mitigating any human hindrances in implementing any environmental policies throughout the organization.

- The environmental NGOs should be provided with separate report disclosing the environmental activities and related monetary figures. The narrative should be easy to understand and should not be cluttered with technical jargon which is difficult to comprehend by an ordinary user. As far as possible the report should be prefaced with explanatory terms containing the meaning of difficult technical words.
- The companies should have a ready-to-access platform that gives a place to discuss the information disclosed. Internet can work as a potential platform for interaction. The email addresses of related persons should be made available for sharing information. The delivery of response should be tracked as well as graded by the information seeker. These remarks should be counted towards promotion and other career advancement activities.

#### ROLE OF STAKEHOLDERS

- The ENGOs should be provided with legal advice without any fees for negotiating any environmental issues with the corporate as it has been conveyed by the ENGOs that it is difficult to pursue cases of environmental violations against corporate due to lack of resources.
- The ENGOs should organize themselves and interlink with other similar organisations as well as governmental authorities so that they become a strong and recognizable force.
- It is high time, for development of environment information system for transmission of environmental information between Government and Business i.e., G2B, and between Business and Environmental stakeholders i.e., B2S.

#### ROLE OF POLLUTION CONTROL BOARDS

- The pollution control boards should require corporate to hold regular meetings with ENGOs. The minutes of the meeting should be submitted to pollution control boards and the same should be available to general public as well.
- The pollution control boards should require submission of reports on a list of dimensions as discussed in the present thesis and validated by ENGOs.

- There should be regular corporate assessments by ENGOs on environmental indicators to evaluate the effectiveness of dimensions and environmental performance.
- The names of the companies which report regularly and diligently should be published by the board to give them recognition in the eyes of public.

#### ROLE OF GOVERNMENT

Apart from above, the governmental role is undeniably important in Indian context.

- The names of the company should reflect its contribution to green activities. For this to happen the names of the companies should contain the 'green' word or 'green' logo in the form of a leaf etc., for instance, Shree Cement Ltd should be allowed to represent itself as Shree Cement (green) Ltd., to reflect its contribution to environment. This would enhance the image of the company in the minds of employees as well as ENGOs. The employees would feel the drive to contribute voluntarily towards green activities.
- Corporate environmental ratings and punitive actions by environmental agencies against defaulters though necessary should be complemented with giving incentives to organisations in the form of soft loans, out-of-turn provision of financing etc.
- The government should work in right earnest at capacity building of ENGOs. The governmental agencies should strengthen mechanisms like Green Benches/Tribunals for effective imposition of any sanctions.
- The performance of Green benches should be periodically reviewed and different modes should be explored that grant them more strength like giving them the authority/power of courts etc for strengthening them for providing support to ENGOs.

#### ROLE OF REPORTING GUIDELINES FRAMING AGENCIES

- ICAI should undertake responsibility to devise and regularly update environmental accounting and auditing framework. The related principles and standards should be devised and updated regularly as the current study suggested

that managers have faced difficulty in accounting for environmental assets and liabilities.

- The corporate should be given guidelines that can be adopted in phases. The corporate should be provided with sufficient time interval between different phases.

Listing requirements of SEBI

- The SEBI should incorporate increased compulsory reporting in line with hard and soft predictors as suggested in the present thesis.
- Independent environmental audit should be made compulsory

All the above factors suggest important policy implications for proper implementation of environmental accountability. However, the difficulty can arise from lack of effective demand from stakeholders and the lack of general interest from industry. Besides, the corporate feel that environmental information is not highly read section among various users as identified by corporate managers.

## **8.5 Summary**

For Indian society the results can contribute to understand the differences in the perception of leading players in field of environment and how after erasing their gaps, together they can contribute to environmental sustainability of our nation. The findings revealed various motives and barriers to adoption of environmental accountability. The most important internal barrier is in terms of understanding the consequences of environmental action and implementing of plans. Again the corporate suggested their major driver is being led by regulations. The reason is that there is not enough research conducted on interlinking environmental performance with economic consequences. There is hardly any accounting facility available in India, primarily focussing on dealing with such issues though research realises the great role of accountant in this regard. Again, another reason is that corporate does not consider ENGOs to be their major target audience. This could create a barrier in advancement of environmental efforts, and this primarily could be reason of differences in the opinion of the ENGOs and the corporate. While the former considered that creating a image is the prime motive of disclosures; which was not confirmed by the viewpoints of the latter group. The reason for this

disillusionment is that both the groups are equally important for cherishing environmental issues, they are cause and crusaders of change, yet they do not ideally sit together and deal with the emergent issue at hand. In addition, the non existence of corporate environmental accountability is dependent on other reasons as well, which are lack of accounting support, inadequate regulatory pressure due to deficient staff with CPCB and SPCB, administrative difficulties of conformance and sensitive nature of pollution related information disclosure, lack of strong force of NGOs in general and ENGOs in particular.

## 8.6 References

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